

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bialek et al.
Serial No.: 10/693/474
Filed: October 24, 2003
For: Low Carbohydrate Fiber Containing Emulsion

Group: 1794
Examiner: Carolyn Paden

FEBRUARY 18, 2008

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

I, Sudarshi Tanuja Angelique Regismond, hereby declare that:

1. I am a citizen of Canada.
2. My educational and technical background in the field of chemistry is as follows:

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- (a) I received a Bachelor of Science degree in chemistry from McMaster University in the City of Hamilton, Ontario Canada in June 1994.
 - (b) I received a Doctorate of Philosophy degree in chemistry from McMaster University in the City of Hamilton, Ontario Canada in June 2000.
 - (c) I joined my present employer Unilever in November 2000 and I currently have the title Research Scientist, located in Vlaardingen, The Netherlands.
3. I have read the present Application Ser. No. 10/693,474 and Hercules EP 0 757 895 ("Hercules"), as well as the Fischer abstract.
4. The following experiments were conducted by me in support of the significant differences between the present Application and above-named references.

5. Studies

Example A:

Compositions were prepared as detailed in the Table below.

TABLE A. Composition of formulations

	Product code	LOM JD 183/08	LOM JD 184/08	LOM JD 185/08	LOM JD 186/08	LOM JD 187/08
	Sample	1. Hercules example V	2. Hercules example VI	3. Hercules + Fischer	4. Invention Application Ser. No. 10/693,474 (buttermilk)	5. Invention Application Ser. No. 10/693,474 (egg yolk)
		Composition (on total)				
seq.	Ingredient	%	%	%	%	%
A	Starch Ultra tex 4	0.50	0.50	0.50		
A	Tap water	18.65	18.25	18.15	43.20	52.20
A	CitrusFibre type N			0.50	2.80	2.80
A	LMA Pectin		0.40			
A	Maltodextrin	5.00	5.00	5.00		
A	Sugar	4.00	4.00	4.00	4.00	4.00
A	NaCl	1.00	1.00	1.00	1.00	1.00
B	12% acetic acid	4.00	4.00	4.00	4.00	4.00
B	water	21.00	21.00	21.00		
B	Starch Ultra tex 4	0.60	0.60	0.60		
B	Sunflower Oil	30.00	30.00	30.00	30.00	30.00
B	Xanthan Gum RD	0.25	0.25	0.25		
B	Buttermilk	15.00	15.00	15.00	15.00	
	Pasteurized egg yolk, 0% salt					6.00
	total	100.00	100.00	100.00	100.00	100.00

Procedures:

Composition 1 (LOM JD 183/08) and 2 (LOM JD 184/08) corresponding to Hercules V and VI were prepared in accordance with the procedure exactly

as exemplified in Hercules EP 0 757 895. Composition 3 (LOM JD 185/08) was prepared as in Examples V and VI of Hercules and differed only in that citrus fiber (0.5%) was added in lieu of LMA pectin. Compositions 4 (LOM JD 186/08) and 5 (LOM JD 187/08) were prepared in accordance to the procedure exactly as exemplified in Application No. 10/693,474 using as emulsifier buttermilk and egg yolk, respectively. Compositions 4 and 5 were processed in accordance with the procedures set forth in the present patent application, using APV Gaulin Homogenizer run at 300 bar at ambient temperature.

Example B: Viscosity Measurements

Viscosities of the above samples were determined via the Haake method described in the present Specification at page 11, lines 15-24, and the results are set forth in the Table below. Additionally, Table B records a value of Stevens Texture Analysis which is conventionally used to indicate the firmness or hardness of a dressing product. The Stevens value, expressed in grams, is determined at 20 °C using a typical mayonnaise grid in a Stevens LFRA Texture Analyzer (ex. Stevens Advanced Weighing Systems, UK) with a maximum load/measuring range of 1000 grams and by applying a penetration test of 20 mm at 1 mm/s penetration rate. Also indicated in Table B is the visually observed product character of the dressings being compared:

TABLE B

	LOM JD 183/08	LOM JD 184/08	LOM JD 185/08	LOM JD 186/08	LOM JD 187/08
	1. Hercules example V	2. Hercules example VI	3. Hercules + Fischer	4. Invention F6176 (buttermilk)	5. Invention F6176 (egg yolk)
Stevens Texture Analysis (g)	5	10	13	247	160
Haake viscosity cps	1298	2279	2460	31105	18695
Product Character	Pourable	Pourable	Pourable	Spoonable	Spoonable

6. I conclude the following from these experiments:

The data shows that formulations prepared in accordance with the teachings of Hercules EP 0 757 895 alone (Compositions 1 and 2) and Hercules where LMA pectin was replaced with Fischer's citrus fiber (Composition 3) represent liquid (pourable) dressing products with Haake viscosity values at 1,298 cps to 2,460 cps, well below the spoonable product viscosity lower range of about 16,000 cps. On the other hand, samples 4 and 5 made according to the teachings of present Application Serial No. 10/693,474 result in obtaining viscous (spoonable) dressing products with Haake viscosity values of 18,695 cps to 31,105 cps, well within the spoonable viscosity range of about 16,000 cps to about 80,000 cps. Note, samples 4 and 5 have viscosities within the spoonable product range even when citrus fiber is used as the only texturizer, i.e. in the absence of starch, maltodextrin, and gums. The higher viscosities and spoonable textures achieved by Compositions 4 and 5 in the absence of added starches and gums is clearly an indication of the beneficial affects of processing citrus fibre containing emulsions through a high pressure homogenizer as described in Application Serial No. 10/693,474 compared with those of a conventional colloid mill.

7. I declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and may jeopardize the validity of the application or any patent issuing thereon.

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Dated: FEBRUARY 18, 2008

By: Sudarshi Regional

Title: Research Scientist

2-18-2008